

Mechanical Engineering Academy of Distinguished Alumni

## **Terry J. Hendricks, P.E.** Distinguished Mechanical Engineer, 2019

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MSME, The University of Texas at Austin, 1979 Ph.D., The University of Texas at Austin, 1993

Technical Group Supervisor NASA Jet Propulsion Laboratory

Dr. Hendricks is currently a Project Manager, an ASME Fellow, and an IEEE Senior Member in the Power and Sensor Systems Section, Autonomous Systems Division at NASA-Jet Propulsion Laboratory (JPL)/California Institute of Technology, Pasadena, CA, where he has served in project and line management roles developing hybrid solar power systems, radioisotope power systems, spacecraft power systems, thermal management and thermal energy storage systems critical to NASA missions. He was a multi-disciplinary Project Manager on a DARPA project to develop advanced high-powerdensity thermoelectric devices and innovative highperformance graphite heat exchangers to recover engine waste heat in Extended Range/ Multi-Purpose aircraft. He has recently been Lead System Engineer on the Next-Generation Radioisotope Thermoelectric Generator (RTG) project developing new RTG's for future NASA missions. He was previously an Energy Recovery Program Director at Battelle Memorial Institute, Columbus, OH, and a Senior Program Manager at the U.S. Department of Energy (DOE) Pacific Northwest National Laboratory (PNNL) in Richland, WA and Corvallis, OR from 2005-2013, where he managed and led U.S. DOE and U.S. Army programs in hybrid power system development, automotive and industrial energy recovery, military energy recovery and power system development, and advanced nano-scale heat transfer. He was also Field Program Manager and the Power & Propulsion Task Leader in the Center for Transportation Technologies and Systems at the U.S. DOE National Renewable Energy Laboratory in the early 2000s. Dr.

Hendricks received his Ph.D. and Master of Science in Engineering from The University of Texas at Austin and Bachelor of Science (Summa Cum Laude) in Physics from the University of Massachusetts at Lowell. He has over 39 years of professional experience and expertise in thermal & fluid systems, energy recovery, energy conversion and energy storage systems, terrestrial and spacecraft power systems, micro electro-mechanical systems, and project management. His extensive expertise is cited in 3 book chapters published by Taylor and Francis and Elsevier and over 85 reports and journal articles in the Journals of Electronic Materials; Materials Research: Heat Transfer: Thermophysics and Heat Transfer; International Heat & Mass Transfer; Thermal Radiation Heat Transfer, 5th Edition, Howell, Siegel, and Menguc, (CRC Press, Taylor and Francis Group), Handbook of Heat Transfer, 3rd Edition, Rohsenow, Hartnett, Cho, (McGraw-Hill), and Principles of Heat Transfer in Porous Media, 2nd Edition, Kaviany, (Springer-Verlag), and he was awarded:

• NASA Group Achievement Awards at JPL in 2015 and 2018

•The ASME Columbia Basin Engineer of the Year Award in February 2009 at the Pacific Northwest National Laboratory

• The Midwest Research Institute / Battelle Memorial Institute Chairman's Award in October 2003 at the National Renewable Energy Laboratory.

He is a registered Professional Engineer in the states of California and Texas.